

What Is Claimed Is:

1. A method for forming a contact hole or a via hole in a semiconductor device comprising:

rounding a top edge of a contact hole or a via hole by using a plasma having spiral movement when a metal insulation film or an interlayer insulation film is selectively etched to form the contact hole or the via hole.

2. A method as defined in claim 1, further comprising:

applying, exposing and developing a photosensitive film on the metal insulation film or the interlayer insulation film to form a photosensitive film pattern on a region to contain the contact hole or the via hole;, and

etching the metal insulation film or the interlayer insulation film using the photosensitive film pattern as a mask.

3. A method as defined in claim 2, wherein, etching the metal insulation film or the interlayer insulation film comprises using a gas of fluorine series as an etching gas.

4. A method as defined in claim 1, further comprising:

after the contact hole or the via hole is formed, forming a barrier metal film on an inner wall of the contact hole or the via hole; and

filling the contact hole or the via hole with a metal material.

5. A method as defined in claim 4 wherein filling the contact hole or the via hole with the metal material comprises forming the metal material on the barrier metal film.

6. A method as defined in claim 2, further comprising:
after the contact hole or the via hole is formed, forming a barrier metal film on an inner wall of the contact hole or the via hole; and
filling the contact hole or the via hole with a metal material.

7. A method as defined in claim 6 wherein filling the contact hole or the via hole with the metal material comprises forming the metal material on the barrier metal film.

8. A method as defined in claim 3, further comprising:
after the contact hole or the via hole is formed, forming a barrier metal film on an inner wall of the contact hole or the via hole; and
filling the contact hole or the via hole with a metal material.

9. A method as defined in claim 8 wherein filling the contact hole or the via hole with the metal material comprises forming the metal material on the barrier metal film.